



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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November 3, 2010

Mr. Rodney N. Barry, P.E.
Division Administrator
Federal Highway Administration
Georgia Division
61 Forsyth Street, SW
Suite 17T 100
Atlanta, Georgia 30303-3104

SUBJ: EPA Comments on the
Supplemental Draft Environmental Impact Statement (SDEIS)
for the Northwest Corridor Project I-75 and I-575
Cobb and Cherokee Counties, Georgia
CEQ No. 20100372

Dear Mr. Barry:

The U.S. Environmental Protection Agency (EPA) has reviewed the referenced Supplemental Draft Environmental Impact Statement (SDEIS) in accordance with Section 309 of the Clean Air Act and Section 102(2)(C) of the National Environmental Policy Act (NEPA). The SDEIS states that the purpose of the project is to make improvements to the existing highways. This document supplements and updates the Alternatives Analysis DEIS published in 2007. Our detailed review comments regarding the SDEIS are enclosed.

The Georgia Department of Transportation (GDOT) and the Federal Highway Administration (FHWA) propose to make changes to I-75 and I-575 in the northwest corridor of the Atlanta metropolitan area. These changes will involve approximately 27 miles of highway, from I-75 south of the I-285 interchange at Akers Mill Road to north of Hickory Grove Road, and on I-575 from I-75 to Sixes Road. The stated purpose is to improve transportation, increase capacity, improve mobility, and provide equitable transportation in a cost-effective manner.

EPA commented on previous NEPA documents regarding this project. The Alternatives Analysis DEIS (published in May 2007) evaluated alternatives for the construction of high-occupancy vehicle (HOV) lanes, truck-only lanes (TOL), bus rapid transit (BRT) stations, park-and-ride facilities, and improved local and express bus service.

In EPA's comment letter dated August 13, 2007, EPA expressed environmental concerns regarding environmental impacts and the consideration of alternatives, particularly that light rail was eliminated early in the evaluation process based on criteria (cost) that may not have been applied consistently to the other alternatives. EPA recommended that design alternatives or operating options that include BRT operating in its own dedicated HOV lane be evaluated, and

that consideration for the design of the preferred alternative have flexibility for future addition of rail modes.

The current SDEIS evaluates conditions that have changed since the publication of the DEIS in 2007. The SDEIS evaluates the no-build alternative and presents a new Two-Lane Reversible Alternative (Build Alternative), which calls for tolled, reversible managed lanes to alleviate traffic congestion. BRT and TOL lanes are not included in this alternative, nor is the potential future addition of rail. The Build Alternative includes plans for extending existing HOV lanes further north. The proposed new managed lanes would be reversible lanes, not HOV lanes.

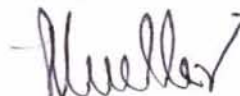
The Build Alternative would include existing northbound and southbound general purpose lanes, alongside barriers enclosing tolled, reversible managed lanes. The managed lanes would direct vehicles in one direction during specified times of the day to alleviate traffic congestion. The SDEIS notes that this alternative more closely matches the financial resources available for implementation than previous alternatives. The SDEIS also notes that a recommended preferred alternative has not yet been selected, and that this decision will be made after agency and public comments regarding the SDEIS are evaluated.

According to the SDEIS, the Build Alternative will impact approximately 0.3 acres of wetlands, 150 linear feet of streams, 17 acres of 100-year floodplains, 659 Category B sites and 82 category C noise sites, 11 hazardous waste sites (rated medium), 6 residential and 11 business relocations in minority and low-income neighborhoods, and possibly 1 endangered species (Cherokee darter). The project is also located within a non-attainment area for fine particulate matter and two EPA designated Priority Watersheds.

Based on the information provided in the SDEIS, the Build Alternative was rated "EC-2," meaning that environmental concerns exist, and that additional information should be provided in the Final EIS (FEIS). In particular, there are environmental concerns related to mobile source air toxics (MSATs), air and water quality impacts, Environmental Justice (EJ) impacts, Greenhouse Gases (GHG), and construction and traffic noise impacts. Our detailed comments are enclosed.

We appreciate your coordination with us, and look forward to reviewing the FEIS. If you have any questions, please contact Ramona McConney at (404) 562-9615 or Ntale Kajumba at (404) 562-9620.

Sincerely,

A handwritten signature in black ink, appearing to read "Mueller", with a stylized flourish at the end.

Heinz J. Mueller, Chief
NEPA Program Office
Office of Policy and Management

Enclosures: EPA Review and Comments
Summary of Rating Definitions and Follow Up Action

cc: Mr. Darryl D. VanMeter, P.E., Georgia Department of Transportation

EPA Review and Comments
Draft Supplemental Environmental Impact Statement (SDEIS) for the
Northwest Corridor Project I-75 and I-575
Cobb and Cherokee Counties, Georgia

General

In response to financial feasibility concerns and public feedback since the publication of the Alternatives Analysis DEIS (May 2007), this SDEIS describes a new, lower-cost alternative, called the Two-Lane Reversible Alternative. The SDEIS identifies the goal of roadway improvement by alleviating traffic congestion. The stated purpose is to improve transportation, increase capacity, improve mobility, and provide equitable transportation in a cost-effective manner.

EPA reviewed the Alternatives Analysis DEIS in 2007, and recommended that design alternatives or operating options that included bus rapid transit (BRT) operating in its own dedicated high-occupancy vehicle (HOV) lane be evaluated, and that consideration for design of the preferred alternative allow for flexibility for future addition of light rail. However, the Two-Lane Reversible Alternative does not include BRT or consideration of future addition of light rail. In addition, EPA is concerned about the impacts of supporting infrastructure for the project and, in accordance with NEPA, considers these activities as part of the project, and not a separate action.

While the SDEIS notes that a recommended preferred alternative has not yet been selected, and that this decision will be made after agency and public comments are evaluated, the document refers to the Build Alternative as the proposed project (Section 5.14.4.4) and outlines mitigation measures for impacts from this alternative.

Air Quality

The Build Alternative proposes to widen 27 miles of highway. The widening would result in increased vehicular traffic along the corridor, which could lead to increased regional criteria pollutant emissions. While the project area is classified as an attainment area for PM₁₀, and a PM₁₀ hotspot analysis is not required (Section 5.11.1), the project area is a non-attainment area for PM_{2.5}. Consequently, the project will undergo a required interagency consultation process by the EPA, FHWA, Federal Transit Administration, Georgia Environmental Protection Division (EPD) and the Atlanta Regional Commission, to decide whether or not the project has air quality concerns.

Recommendation: The FEIS should include updated information from the interagency consultation process, including an assessment of the potential air quality issues. If the project results in air quality concerns, then measures to offset these impacts should also be discussed.

Mobile Source Air Toxics (MSATs)

According to the SDEIS, the project falls within FHWA's Tier 3 approach for projects with a high potential for MSAT effects. Tier 3 is defined as a quantitative analysis to differentiate alternatives for projects with higher potential MSAT effects. FHWA's Easy Mobile Inventory Tool (EMIT) model was used to calculate annual MSAT pollutants in tons per year for the no-build and Build Alternatives. The current version of EMIT has not yet been updated to reflect all the MSATs of concern listed in EPA's September 2009 rule. The MOBILE6.2 model was also used for each roadway (Section 5.11.1.3)

The SDEIS concludes that there would be no measurable changes in MSAT emissions in the immediate area of the Northwest Corridor under the Build Alternative. MSAT levels could be higher in some locations than others (i.e., I-75), but according to FHWA and GDOT, the current methods are not adequate to identify them.

Recommendation: While current tools do not predict health impacts, they do allow a comparison of potential impacts among alternatives, and the FEIS should include further information. Mobile Source Air Toxics concentrations should be modeled in order to compare those concentrations under today's conditions and at several future points in time, including at the time when emissions are predicted to be greatest. These comparisons should be carried out for several locations: where sensitive populations are located (schools, day care centers, etc.), where population density is high (residential and commercial areas, etc.), and where concentrations are anticipated to be elevated (i.e., in hot spots). Based on these estimated concentrations, a screening level risk comparison should be developed, to better inform the consideration of the project's potential impacts.

The following documents are useful references:

- Carr, E.L.; Ernst, D.A.; Rosenbaum, A.; Glass, G.; Hartley, S. (2007) Analyzing, documenting, and communicating the impacts of mobile source air toxic emissions in the NEPA process. Contractor report under NCHRP project 25-25.
- EPA (2004) Air Toxics Risk Assessment Reference Library. Volume 1: Technical Resource Manual. Report number EPA-453-K-04-001A. [Online at http://www.epa.gov/ttn/fera/risk_atra_vol1.html] This document has been extensively peer-reviewed.

Greenhouse Gases (GHGs)

While we agree that carbon dioxide (CO₂) builds up in the atmosphere over time from emissions from many global sources, we also believe that the SDEIS should address the calculations for estimating the GHG emissions associated with the project.

Recommendations: EPA encourages GDOT to take reasonable actions to evaluate and potentially minimize GHG emissions where possible, pursuant to the draft NEPA Guidance from the Council on Environmental Quality (CEQ), *Consideration of the Effects of Climate Change and*

GHGs, (<http://www.whitehouse.gov/sites/default/files/microsites/ceq/20100218-nepa-consideration-effects-ghg-draft-guidance.pdf>).

The FEIS should include, at a minimum, calculations regarding estimated upper bound annual emissions of CO₂ equivalents for the project and whether those anticipated emissions will be above or below 25K metric tonnes/year, (including construction and maintenance vehicles and equipment and the cars and trucks traveling on that segment of the highway). As noted in the CEQ Guidance, the consideration of current or projected effects of climate change on the project should also be discussed.

EPA also recommends a discussion of best management practices (BMPs) to reduce GHGs and other air emissions during construction and maintenance of the managed lanes. Specifically, clean energy options such as energy efficiency and renewable energy should be a consideration in the use of construction and maintenance equipment and vehicles. For example, equipment and vehicles that use conventional petroleum (e.g., diesel) should incorporate clean diesel technologies and fuels to reduce emissions of GHGs and other pollutants, and should adhere to anti-idling policies to the extent possible (see our detailed Diesel Exhaust comments in the next section). Alternate fuel vehicles (e.g., natural gas, electric) are also possibilities.

Diesel Exhaust

In addition to the EPA's concerns regarding climate change effects and GHG emissions, the National Institute for Occupational Safety and Health (NIOSH) has determined that diesel exhaust is a potential human carcinogen, based on a combination of chemical, genotoxicity, and carcinogenicity data. In addition, acute exposures to diesel exhaust have been linked to health problems such as eye and nose irritation, headaches, nausea, and asthma. Although every construction site is unique, common actions can reduce exposure to diesel exhaust.

Recommendation: EPA recommends that the following actions be considered for construction equipment:

- Using low-sulphur diesel fuel (less than 0.05% sulphur).
- Retrofit engines with an exhaust filtration device to capture Diesel Particulate Matter (DPM) before it enters the workplace.
- Position the exhaust pipe so that diesel fumes are directed away from the operator and nearby workers, thereby reducing the fume concentration to which personnel are exposed.
- A catalytic converter reduces carbon monoxide, aldehydes, and hydrocarbons in diesel fumes. These devices must be used with low sulphur fuels.
- Work practices and training can help reduce exposure. For example, measures such as turning off engines when vehicles are stopped for more than a few minutes; training diesel-equipment operators to perform routine inspection and maintenance of filtration devices.
- When purchasing a new vehicle, ensure that it is equipped with the most advanced emission control systems available.
- With older vehicles, use electric starting aids such as block heaters to warm the engine, avoid difficulty starting, and thereby reduce diesel emissions.

Water Resources

The Build Alternative would impact 150 linear feet of streams (2 streams), 17 acres of 100-year floodplain, and 0.3 acre of jurisdictional wetlands, and would require a U.S. Army Corps of Engineers (USACE) Section 404 Nationwide Permit and a National Pollutant Discharge Elimination System (NPDES) permit. According to the SDEIS, the Build Alternative reduces impacts to wetland and stream impacts by approximately 3.9 acres and 16,052 linear feet, respectively, as compared to previous build alternatives evaluated in the DEIS. Encroachment on regulatory floodways would occur as a result of the Build Alternative.

All of the water resource impacts would occur in EPA designated Priority Watersheds – the Upper Chattahoochee and the Etowah River drainage basins. The stream and wetland impacts would be mitigated in accordance with the April 2004 USACE Standard Operating Procedure (SOP) for compensatory mitigation (Section 5.14.1.2). Plans call for compensatory mitigation via 562.5 stream and 1.93 wetland/open water mitigation bank credits, respectively (either a commercial bank or GDOT's mitigation banking system).

Recommendation: Measures to minimize impacts to aquatic resources should be discussed in the FEIS, incorporated into the project final design, and committed to in the Record of Decision (ROD). These measures could include incorporating best management practices, bridging water resources to the maximum extent practical, increasing slope ratios and placing retaining walls at 100-year floodplain crossings, and other measures. Coordination with Federal Emergency Management Agency and Georgia Department of Natural Resources (GDNR) should continue and be documented in the FEIS.

Threatened and Endangered Species

EPA notes that BMPs would be implemented to ensure that the federally-listed Cherokee darter and the potential habitat for the Cherokee darter and state-listed species would not be impacted by the proposed project.

Recommendation: The FEIS should include updated information regarding coordination with the US Fish and Wildlife Service and the GDNR regarding potential impacts to threatened and endangered species and their habitats.

Noise

Construction and traffic noise impacts are areas of concern regarding the Build Alternative. Of particular concern are the incremental noise increases over existing levels, and the resultant projected noise levels. In addition to traffic noise affecting residences and commercial sites along highways, it should also be noted that traffic across bridges and overpasses can be particularly noisy. This is because bridges and overpasses are high and exposed, and vehicle tires traveling across expansion joints produce additional noise.

The SDEIS notes that construction noise impacts will be minimized to the extent possible. The SDEIS also notes that a final decision about whether to install noise barriers to mitigate traffic noise will be made upon completion of additional detailed noise abatement analysis.

Recommendations: Since the proposed project involves adding new travel lanes to an existing roadway, measures to mitigate for increased traffic noise should also be considered. The FEIS should contain updated information regarding this analysis and the feasibility of noise barriers. Other forms of noise mitigation (or their combination) should also be considered, where barriers are shown to be infeasible or unacceptable, particularly in residential areas.

Additional forms of mitigation may include soundproofing significantly affected public facilities or shifting of the right-of-way (ROW) away from heavily affected residential or commercial receptors that otherwise would be adjacent to the project ROW. Mitigation may also include the development of dense evergreen vegetative buffers in order to provide both noise reduction and a visual separation from the project ROW, and use of roadway surfacing material that reduces the amount of noise impacts.

We also recommend the use of hearing protection equipment in those situations where workers are exposed to dangerous noise levels. The following link includes additional information from the Centers of Disease Control and Prevention and NIOSH regarding noise and hearing loss prevention: <http://www.cdc.gov/niosh/topics/noise/>.

Environmental Justice (EJ)

The SDEIS discussed potential effects of the proposed widening project on minority and low-income populations. The Build Alternative will affect some EJ communities adjacent to the project corridor, such as I-75 in Cobb County. According to the SDEIS, these communities are likely to experience adverse effects associated with property acquisition, increases in noise, decreased air quality and construction times. In addition, the SDEIS also discusses the potential impacts associated with tolling on low-income populations.

The purchase of additional ROW will affect local low-income and minority residents and businesses primarily located in the City of Marietta (Section 5.6). Six residents and 11 businesses would be displaced by the proposed project. All of these displacements are identified in the SDEIS as occurring in minority and low-income neighborhoods (Section 5.6.3.2). Compensation for property loss and relocation assistance will be provided by GDOT.

The Build Alternative will also result in visual and noise impacts to low-income and minority populations. According to the SDEIS, visual impacts could be offset by the use of context sensitive aesthetic treatments and possibly landscaping. Noise mitigation in the form of a noise barrier between South Marietta Parkway and Allgood Road is currently proposed for the section of the project where EJ populations reside. The DSEIS notes that a final decision on the installation of noise barriers will be made upon completion of additional detailed noise abatement analysis based on final design and public outreach. The FEIS should clarify how many residents this barrier will affect and what the projected reduction in noise levels will be,

and updated information regarding the status of the abatement analysis, design process, and public outreach regarding noise abatement.

In addition, the SDEIS evaluates the potential effects of tolling on low-income populations. The mitigation measures recommended in the SDEIS (Section 5.6.6) include mailing list notifications regarding public involvement opportunities; making efforts to reduce property acquisitions, especially in EJ neighborhoods; public outreach to EJ communities; access to the managed lanes, particularly by disadvantaged persons; and facilitation of managed lane access by disadvantaged populations.

Public disclosure is a requirement of the NEPA and FHWA processes and is not a mitigation measure. The measures referred to in Section 5.6.6 for continuing to notify local communities of pending activities will not mitigate for impacts. Nevertheless, EPA does note that specific efforts were made to outreach to populations with limited English proficiency (LEP), particularly related to ensuring that translation services and documents written in other languages were publicly available.

Recommendations: The FEIS should provide specific commitments to ensure that tolling does not have a disproportionately adverse effect on EJ populations. These commitments could include measures discussed in the SDEIS such as reduced toll rates for low-income residents and alternative methods of payment. EPA also recommends continued engagement with potential EJ populations to ensure that the final tolling plans include measures that enable local low-income residents to use the toll lanes without experiencing disproportionate impacts.

The FEIS should clarify the financial plans and terminology referred to in the DSEIS. The recommendation that the project financial plan include alternatives to provide access should clarify whether FHWA and GDOT are referring to financial subsidies, vouchers or discounted rates. Also, the term “disadvantaged populations” is used in Section 5.6.4 and throughout the document, and should be clearly defined in the text.

EPA notes that the Build Alternative will have disproportionate relocation impacts on low-income and minority residents. In addition to providing relocation assistance, GDOT should engage the communities within the project area who will be most affected by the widening to ensure that the mitigation proposed is adequate. Commitments regarding noise mitigation around EJ communities should also be discussed in the FEIS, along with the projected decrease in noise anticipated as a result of these measures. In addition, updated information regarding ongoing community engagement efforts and responsiveness summaries to public comments should also be included in the FEIS.

Historic and Cultural Resources

No historic resources or archeological sites were identified within the Area of Potential Effect. The SDEIS discusses the Section 106 evaluation, and on June 1, 2010, the Georgia Department of Natural Resources Office of Historic Preservation Division issued a concurrence letter on the project’s historic resources survey report. The SDEIS notes that no mitigation is required.

Tolling

The SDEIS notes that tolling plans are in development, and that transit, military and emergency vehicles would be exempt from tolls. The SDEIS does not clarify how tolls will be collected, whether at toll booths, offsite purchase from service centers, or electronic payments. The FEIS should include updated information regarding the development of tolling plans, if new information becomes available.

SUMMARY OF RATING DEFINITIONS AND FOLLOW UP ACTION*

Environmental Impact of the Action

LO-Lack of Objections

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC-Environmental Concerns

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impacts. EPA would like to work with the lead agency to reduce these impacts.

EO-Environmental Objections

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU-Environmentally Unsatisfactory

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS state, this proposal will be recommended for referral to the CEQ.

Adequacy of the Impact Statement

Category 1-Adequate

The EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collecting is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2-Insufficient Information

The draft EIS does not contain sufficient information for the EPA to fully assess the environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3-Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640 Policy and Procedures for the Review of the Federal Actions Impacting the Environment